DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453

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Contract #: 04-0120F4

Cty: SF/Ala Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-012888 Address: 333 Burma Road **Date Inspected:** 06-Mar-2010

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower Components

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 11

This QA Inspector randomly observed the following work in progress in Bay 11:

SMAW welding of run-off plates at the 2 ends of a plate assembly containing weld joints ND1-STSA4-6-131M-1-1A, ND1-STSA4-6-131M-1-2A, ND1-STSA4-6-135M-1-1A, ED1-STSA4-6-135M-1-1A, ED1-STSA4-6-135M-1-2A, located on PCMK's north and east towers, multiple shear plates. Welder was identified as 040675. ZPMC QC was identified as ZPMC CWI Yu Dong Ping (QC1). The welding variables recorded by QC1 appeared to comply with WPS-B-T-4211-B-U3b-1. Also present at this location and appearing to be monitoring the welding related operations was ABF Representative Xie Yan.

SMAW welding of weld joint WSD1-TL5-4B/F-20B located inside PCMK west tower, lift 5, skins A/B corner. Welder was identified as 049099. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Shao Hai Long, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-3211-TC-U4b-1. Also present at this location and appearing to be monitoring the welding related operations was ABF Representative Luo Lai Quan.

SMAW welding of weld joint WSD1-TL5-4B/F-32B located inside PCMK west tower, lift 5, skins A/B corner.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Welders were identified as 046704, 040656. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Shao Hai Long, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-3211-TC-U4b-1. Also present at this location and appearing to be monitoring the welding related operations was ABF Representative Luo Lai Quan.

SMAW tack welding of weld joints SD1-SA4-56-123M-4-1A, SD1-SA4-56-123M-5-1A, SD1-SA4-56-123M-2-1A, SD1-SA4-56-123M-1-1A, located on PCMK south tower, multiple shear assemblies. Welder was identified as 202100. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Shao Hai Long, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-3211-B-U4b-1. Temporay alignment bars were also being welded to the multiple shear assemblies. ZPMC QC Shao Hai Long, as QC1's assistant, was monitoring this welding also and the welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-4112-1 and WPS-B-T-4113-1. Also present at this location and appearing to be monitoring the welding related operations was ABF Representative Luo Lai Quan.

Bay 10

This QA Inspector randomly observed no apparent welding work in progress in Bay 10.

Heavy Dock

This QA Inspector randomly observed the following work in progress on the Heavy Dock:

FCAW welding of weld joint SSD1-SA15D/F-10 located on PCMK south tower, lift 1 base, shear plate stiffener to connection plate. Welder was identified as 053869. ZPMC QC was identified as ZPMC CWI You Qi Guo (QC2). Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC He Gen, who was not a CWI. The welding variables recorded by QC2's assistant appeared to comply with WPS-B-T-2333-TC-P4-F. Electric preheat was being applied to this location and various other locations to be welded later.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No significant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest, 150-0042-2360, who represents the Office of Structural Materials for your project.

Inspected By: Goulet, George Quality Assurance Inspector

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Reviewed By: Dawson,Paul QA Reviewer